THERMAL INFRARED SURVEY
HAZARDOUS MATERIALS DISPOSAL SITES
IOWA, KANSAS AND MISSOURI
JULY 1979

EMSL-LV PROJECT AMD 7964

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LAS VEGAS, NEVADA 89114

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U.S. EPA REGION VII
SUPERFUND SECTION
324 EAST 11th ST.
KANSAS CITY, MO 64106

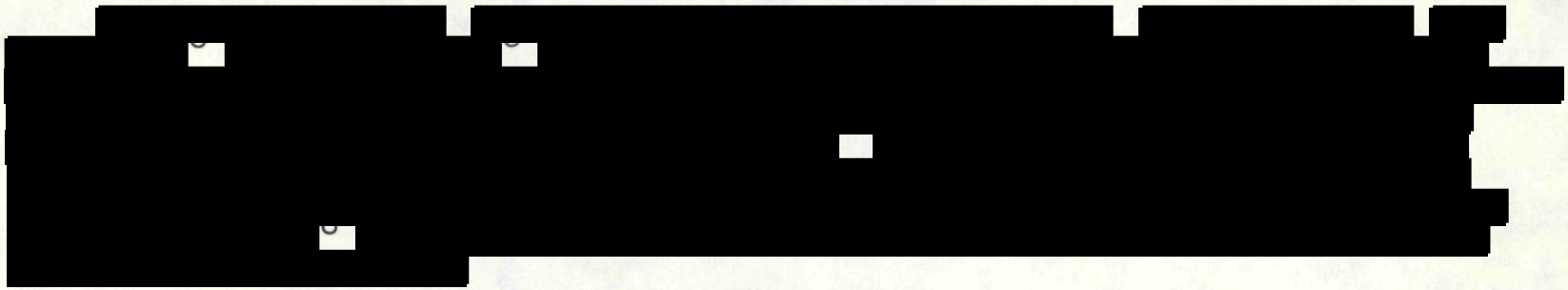
[redacted]

PROJECT SUMMARY

Using an airborne thermal scanner, a thermal survey of twenty-two hazardous materials disposal sites was conducted at the request of the Director, Air and Hazardous Materials Division, Environmental Protection Agency, Region VII. The overflights were conducted in July, 1979, in the states of Iowa, Missouri and Kansas.

Of the twenty-two sites surveyed, only the eleven listed in the Site Index (page 2) displayed significant thermal signatures and are included on the imagery displayed in this report. All sites were simultaneously surveyed with color infrared photography. A subsequent report, based on analysis of the color film of all sites, will be published at a later date.

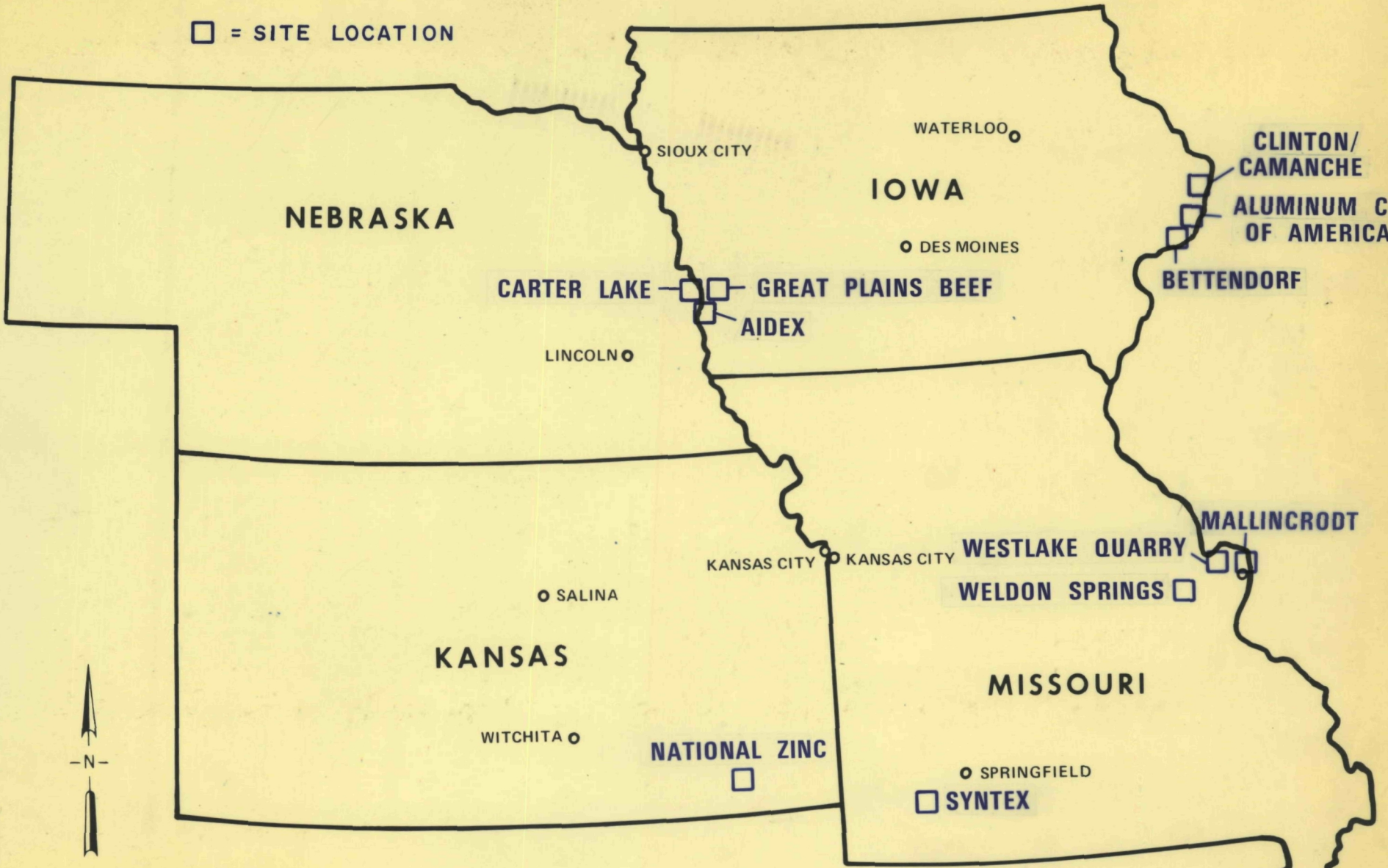
On the following pages, thermal images of each area show color-coded water temperature distributions. For reference purposes, the coldest water temperature in each complete scene is designated as zero degrees Celsius. With the exception of one site, other temperatures are displayed in 0.5° Celsius increments and referenced to this temperature. Due to high temperature variance (14.0° Celsius) the thermal map of the Aluminum Company of America (page 7) was displayed in 2.0° increments. Although not requested by the Region, partial coverage of this plant was obtained in conjunction with the survey of the Bettendorf Oil Spill site. The high temperature recorded in the settling pond, the inadequacy of the pond containment and the close proximity to the Mississippi could pose a spill threat.



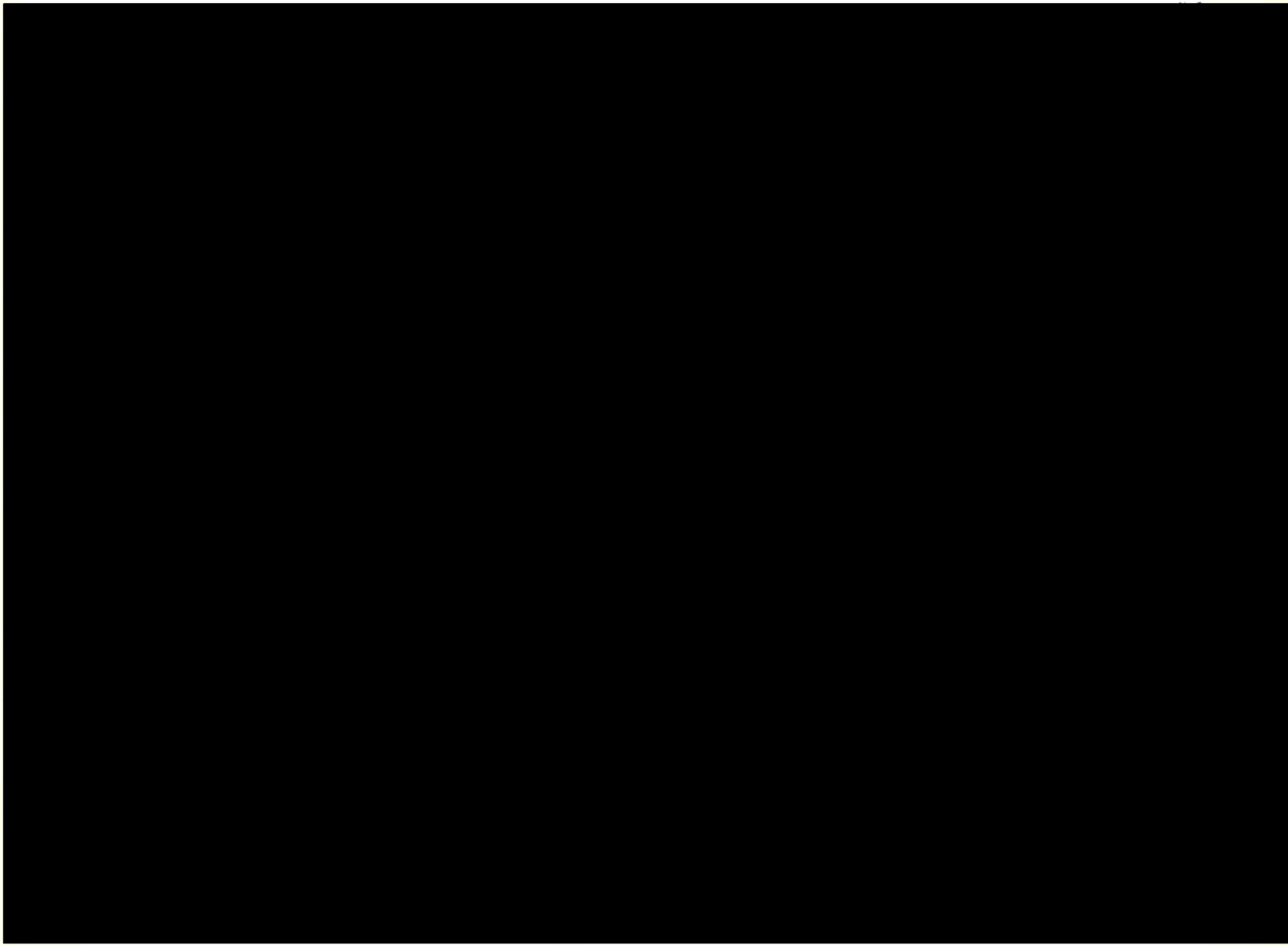
The thermal maps of the remaining sites included in this report appear to present little, if any, thermal influence to adjacent water bodies.

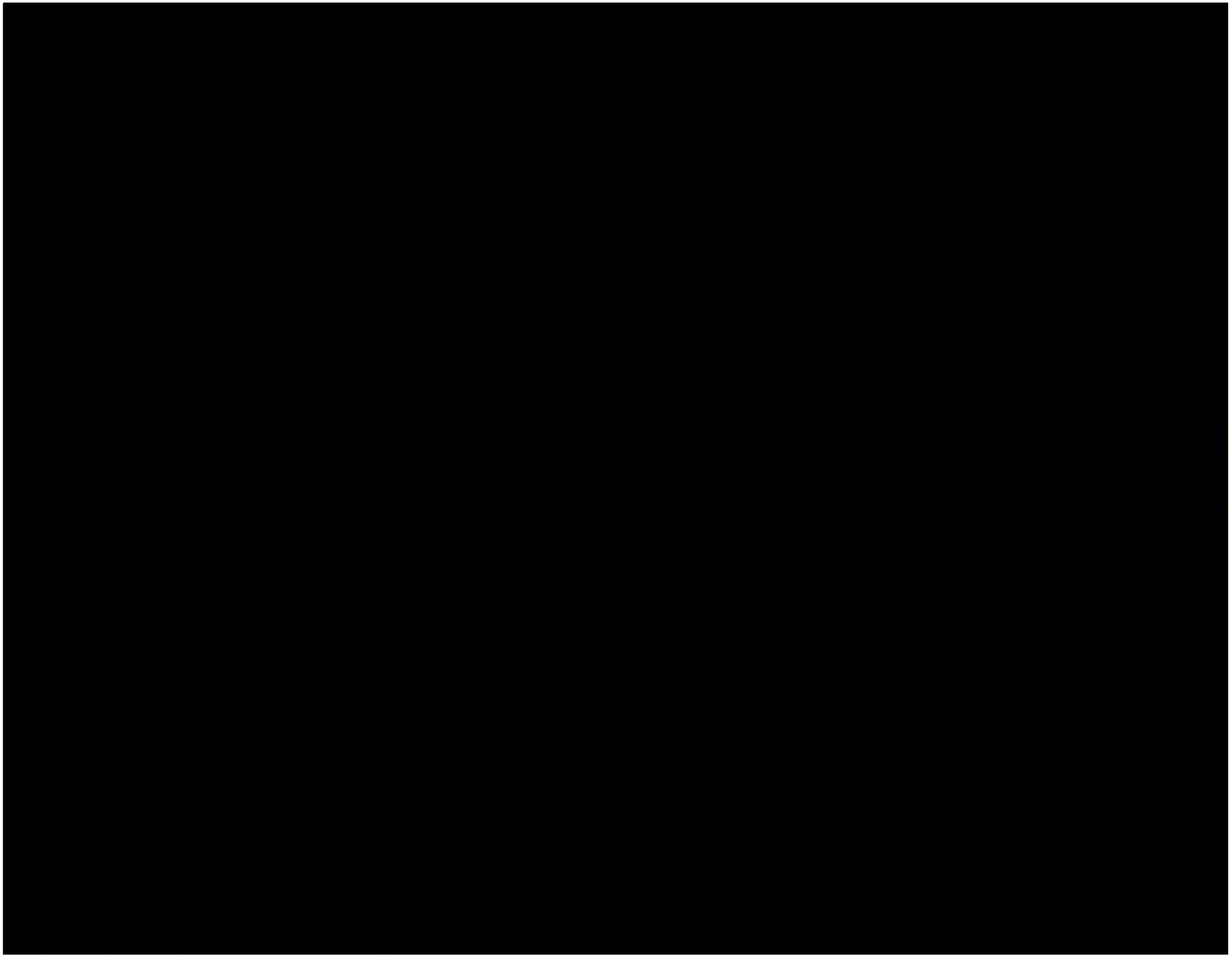
SITE INDEX

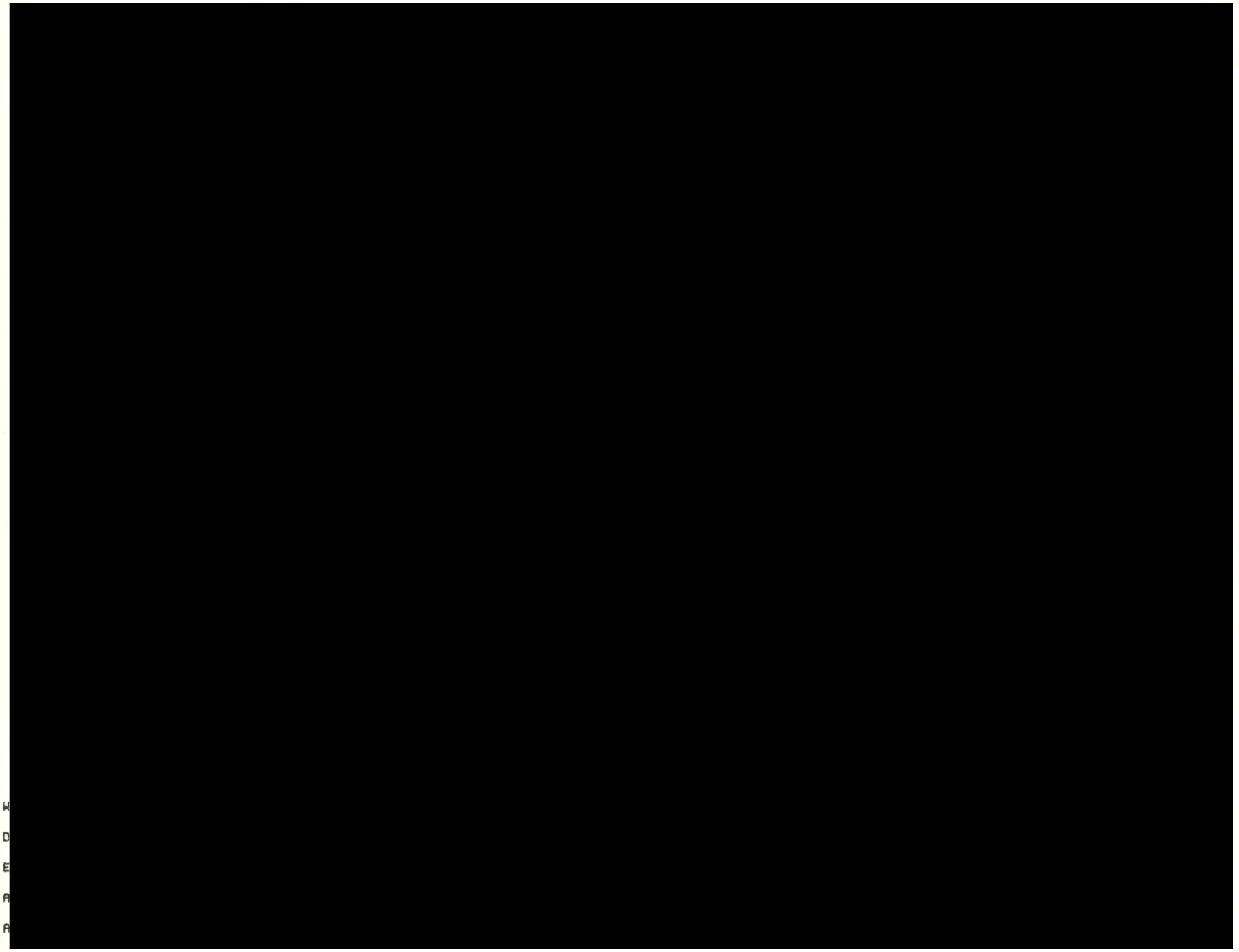
THERMAL SURVEY SITES

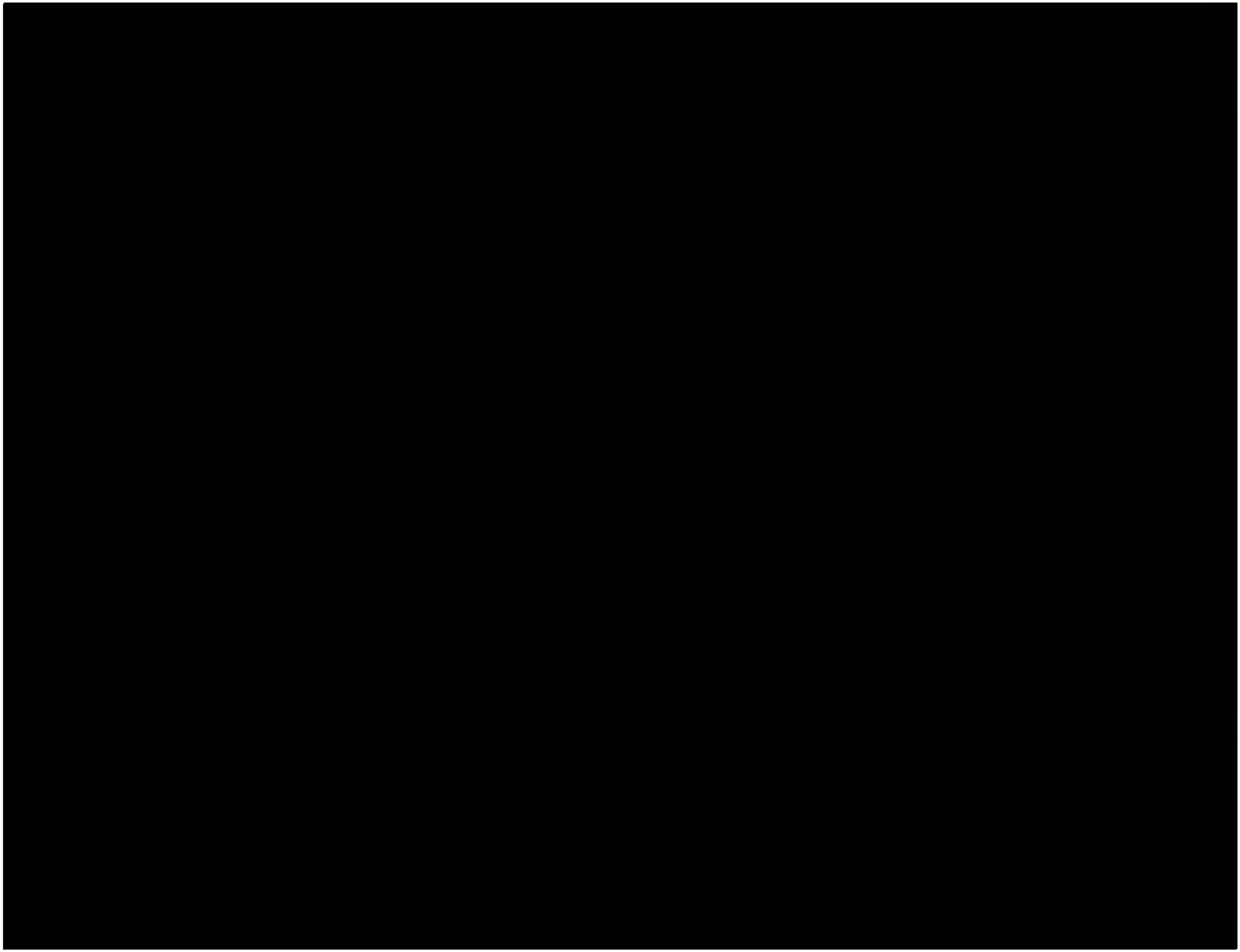


APPROXIMATE SCALE: 1 INCH = 386 KILOMETERS (240 MILES)









[redacted]

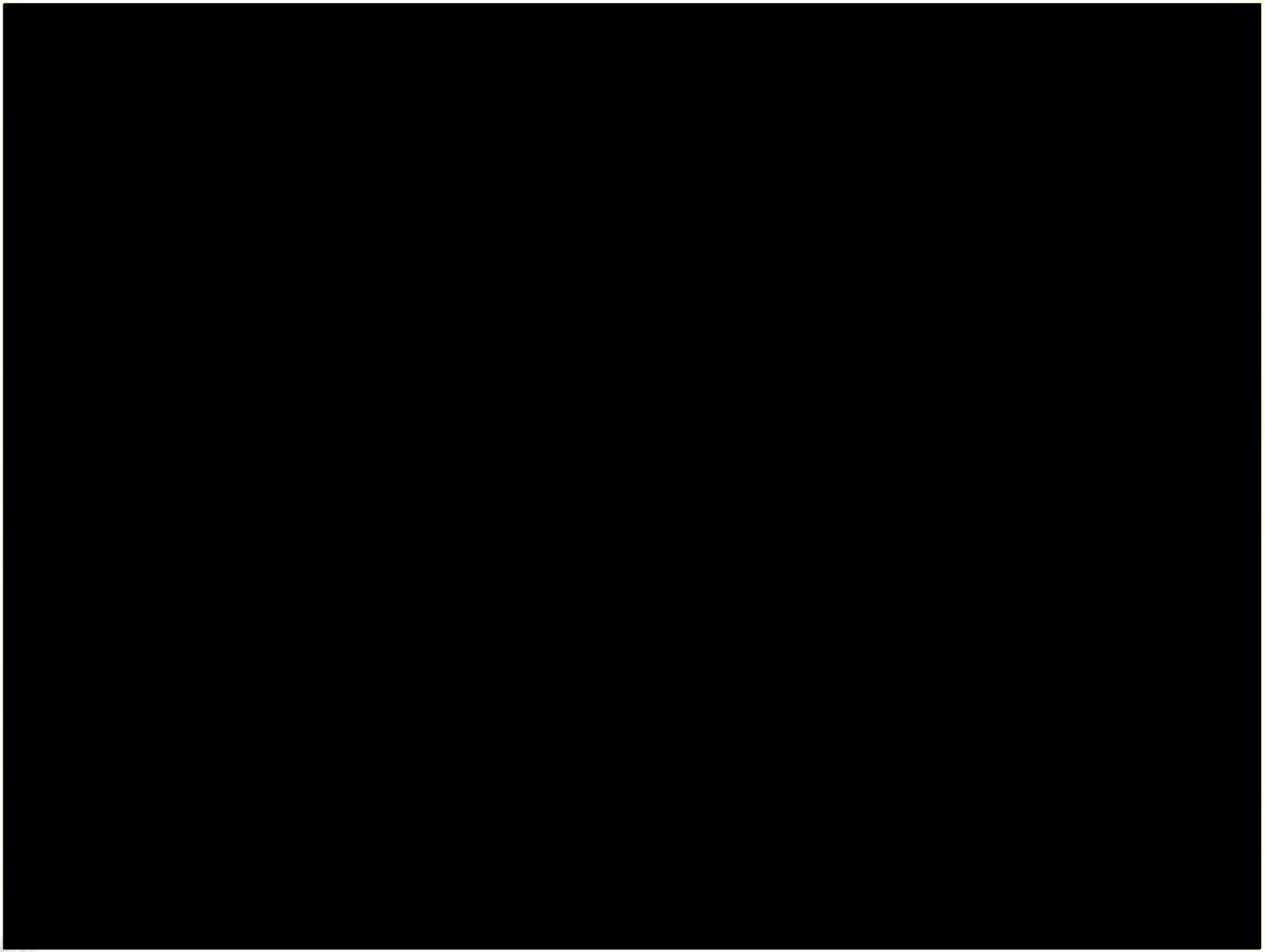
WA

DR

EM

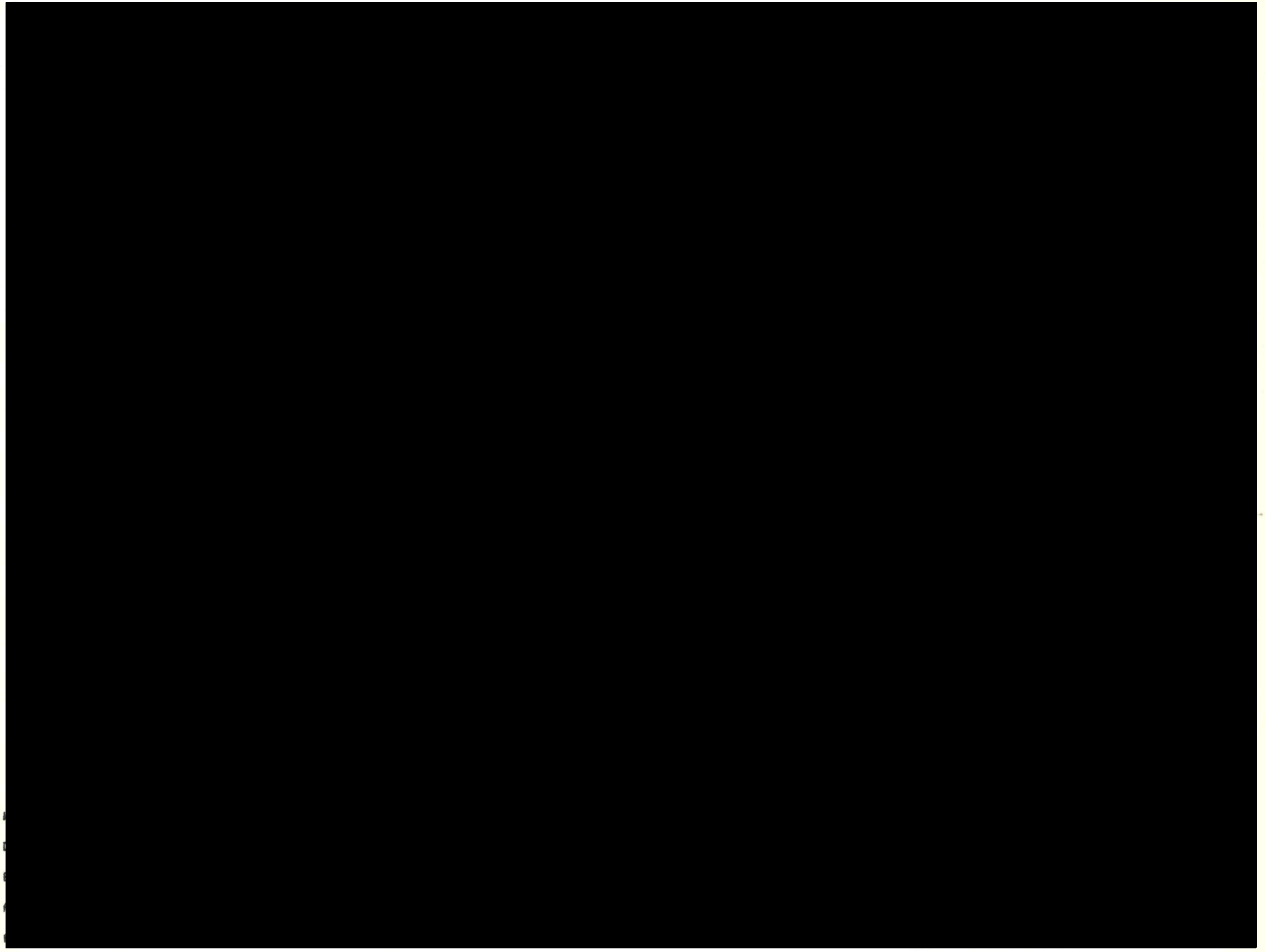
AC

AL



RELATIVE TEMPERATURE

[redacted]



SYNTEX AGRIBUSINESS COMPANY
VERONA, MISSOURI

WATER BODY - SPRING RIVER

DRAINAGE - NORTH

EMSL/LV PROJECT AMD 7964

ACQUIRED 7/26/79 1238 CDT

ALTITUDE 1250 METERS AGL

N

0 1

KILOMETERS

DEGREES CELSIUS

0 1 2 3 4

RELATIVE TEMPERATURE